

Performance Objectives And Instructional Cues	<b>OUTLINE AND PRESENTATION</b>
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## **LESSON PLAN Identifying, Collecting & Processing Evidence**

### **I. Introduction**

#### **A. Overall Objective:**

1. Demonstrate the technical capacity to effectively conduct crime scene management and preliminary investigations, and other patrol related investigations.

#### **B. Instructional Objectives:**

Upon completion of this course, participants will be able to:

1. Have an understanding of the importance and relevance that evidence plays in law enforcement.
2. Understand the theory of transfer, as it applies to physical evidence.
3. Have an understanding of the value of real evidence.
4. Know the types of evidence that will be encountered
5. Be able to recognize potential evidence
6. Have an understanding of how to collect potential evidence, such as firearms, blood, semen, hair, and fibers.
7. Have a basic understanding of fingerprints.
8. Have a basic understanding of the use and value of fingerprints in an investigation.
9. Understand the different types and categories of fingerprints.
10. Have an understanding of trace evidence and tool marks that can be located at the scene of a crime.
11. Know the importance of maintaining the physical integrity of evidence.
12. Know the importance of maintaining legal integrity of evidence.

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INSTRUCTIONAL METHODS: Class lecture with class participation, handout materials, overheads. This class uses a lot of student participation and hands on activities to relate to classroom information.

ESTIMATED TIME: 8 hrs

INSTRUCTOR:\_\_\_\_\_ DATE:\_\_\_\_\_

PREPARED BY: \_\_\_\_\_ DATE:\_\_\_\_\_

APPROVED BY:\_\_\_\_\_ DATE:\_\_\_Jan 2014\_\_\_

REVISED:\_\_\_\_\_

## II. Evidence

1. People commit crimes, usually through the medium of things - these things together constitute the broad field of physical evidence.
  2. Theory of transfer – when two objects meet, some effect of that meeting can be established and verified at a later time.
  3. Damage at the scene may indicate specific activity that occurred.
  4. Things taken or left behind may determine motive, offense and/or crime.
  5. Things left or taken may be traceable to a specific individual or type of individual or things taken may be traced back to the scene and assist in helping identify the perpetrator.
  6. Physical evidence cannot be wrong – it cannot perjure itself – only its interpretation can err. Only human failure to find it, study and understand it, can diminish its value.
  7. Courts usually put more weight on physical evidence versus testimonial evidence.
- A. Study of physical evidence serves two main purposes
1. Is often a decisive factor in determining guilt or innocence?
  2. Can be material aid in locating the perpetrator of a crime.
- B. Evaluation of Evidence
1. All evidence collected should be evaluated as to its worth in the investigation.
  2. An individual item of evidence may raise slight or very strong inferences, depending on the issue to be resolved.
  3. Evidence must support one or more of the investigator's objectives or it is of no value.
- C. Protection of physical evidence at a crime scene requires an appreciation of the value of real evidence:
1. *Quality* – Judged by the probability with which a particular item can be associated with the perpetrator or object in the possession of the perpetrator. The greater the frequency of occurrence, the less significance can be attached to its quality.
    - (a) Example:
      - (1) Fingerprints are of high quality since no two persons have the same.
      - (2) The quality of a specific blood type varies dependent upon the type: Type AB occurs in 1 out of 20 persons while Type O occurs in 8 out of 20. AB is rarer therefore AB is of higher quality than O.
      - (3) At one time, blood evidence was of less quality than fingerprint evidence, but with DNA testing

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and identification, it is fast approaching or is of the same quality as fingerprint evidence.

D. Judged also by the concept of “Mutually exclusive events” this proposes that the occurrence of one event precludes the occurrence of another.

1. Example:

(a) Perpetrator left blood type A at the scene. Suspect with blood type B cannot be the perpetrator.

E. Determined by the opinion or expert(s), when statistical probability data is absent, who may establish:

1. Association of objects that are so specific that they are considered unique (microscopic analysis)

2. Unique points of contrast or similarities that distinguish an item or event from a larger body of items or occurrences (firearms, documents, impression exams, etc.)

F. Class characteristics and similarity – objects or matter may be classified by similar characteristics and further defined by sub-characteristics.

1. Example:

2. Class – heel of shoe impression

(a) Subclass

(b) Adult man's

(c) Right shoe

(d) Type of shoe

(e) Brand name

Comparability of objects – Objects can be compared to establish physical matches...especially items that may have separated from another part. Becomes high quality if the part from which it was separated is located.

3. Rarity – Establishing that an object is the only one of its kind in a particular group or how frequently something might occur (events, circumstances, objects.) Become high quality if connected to the perpetrator.

4. Transferability – Involves the theory of transfer. Items left at or taken from the scene are referred to as trace evidence. May become high quality if they can be individualized.

G. Generally, physical evidence will be obtained from three main sources:

1. Scene of the crime

2. The victim, if any

3. Suspect and his environment

H. For investigation purposes, crime scene information and evidence may be divided into four categories:

1. Evidence left by criminal at scene

2. Evidence imparted to criminal by scene

3. Location and position of materials affected by crime

4. Information or evidence that is ancillary to the crime

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	<p>5. Types of evidence</p> <p>I. Testimonial</p> <ol style="list-style-type: none"> <li>1. Most common form</li> <li>2. Obtained by interview and interrogation which a person can testify to</li> <li>3. Opinion – introduced as the perception of description of a qualified expert.</li> </ol> <p>J. Documentary – <u>evidence consisting of writings or records, the contents of which, “speak for themselves”</u></p> <ol style="list-style-type: none"> <li>1. Writings, documents, official records</li> <li>2. Collected</li> <li>3. Voluntarily</li> <li>4. Subpoena decus tecum (court order) compelling person to bring records to court.</li> </ol> <p>K. Physical (<i>real</i>) – <u>Evidence with physical properties that establish the crime or identity of the perpetrator.</u></p> <ol style="list-style-type: none"> <li>1. Physical objects such as</li> <li>2. Pistol</li> <li>3. Blood spot</li> <li>4. Broken glass</li> <li>5. Hairs and fibers</li> <li>6. Tool marks</li> </ol> <p>L. Obtained <u>in searches primarily</u></p> <ol style="list-style-type: none"> <li>1. At crime scenes</li> <li>2. In execution of search warrants</li> <li>3. Use of evidence – any of the types of evidence can be used to prove facts in one of the following ways:</li> </ol> <p>M. <u>Direct proof – prove the fact in issue directly. First hand knowledge that can establish the existence of the crime or identity of the perpetrator.</u></p> <p>Most common types:</p> <ol style="list-style-type: none"> <li>1. Eyewitness testimony</li> <li>2. Confession</li> <li>3. Use of evidence – any of the types of evidence can be used to prove facts in one of the following ways:</li> <li>2. <u>Circumstantial proof – prove the facts in issue indirectly by proving a fact which then gives rise to another fact through inference or presumptions. Evidence that has an indirect bearing on establishing the crime or proving the identity of the perpetrator.</u></li> </ol> <p><u>Examples:</u></p> <p><u>Motive</u> – reason crime was committed.</p> <p><u>Opportunity</u> – being in a position to commit the crime.</p> <p><u>Declarations &amp; acts indicative of guilt</u> – actions on the part of a person that raises an inference of guilt.</p> <p><u>Preparation for commission of a crime</u> – acts prior to the crimes, which are preparatory steps to its commission.</p>

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3. Possession of fruits of evidence of a crime – raises presumption that person was connected with the crime.

Examples:

Modus operandi (MO) – raises inference of guilt since we are creatures of habit and will perform the criminal act in essentially the same manner each time committed.

P. Associative evidence – physical evidence which links suspect to crime.

Q. Criminal potentiality – possession of knowledge, skills, tools or facilities that could be adapted to criminal use.

Recognizing Potential Evidence

Articles at the scene of a crime may not always be readily recognizable as evidence.

A preliminary evaluation of objects must be made as they are found to determine whether they have evidentiary value and should be collected.

The following basic checklist should be used to insure that all potential evidence has been recognized and examined:

R. What crime has occurred?

Different types of crime generate different types of physical evidence.

Example: there is a high probability of discovering tool marks at a residential burglary, but a low probability of such evidence at an assault scene.

S. Items unusual to the scene.

Articles which would not normally be found at the type of scene in question should be collected as evidence, since it is likely that the offender either brought the object to the scene (e.g. a bullet) or disturbed the object in its normal location (e.g. a broken vase). Such “out-of-context” items should usually be readily observable.

T. Conversely, the investigator should know items, which should be present at the scene but are not. Such missing articles may later connect a suspect with the crime.

Example:

A television stand with no television set upon it may indicate a burglary or theft.

Items Necessary to Complete the: Corpus Delecti

Since any prosecution requires proof that a crime has in fact been committed (i.e. a corpus delecti), the investigator should process the scene with an eye toward collecting articles which prove a criminal act. Such items may not always be readily noticeable.

Example:

Signs of forcible entry at a burglary, or an empty carton at the scene of a theft.

U. Weapons of Other Instrumentality's of Crime.

Search for objects, which could have been used to commit the offense or to facilitate entry or exit of the offender.

Examples:

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	<p>Weapons at a homicide; tools at a burglary; masks at a robbery; coat hanger at an auto burglary.</p> <p>Associative Items</p> <p><u>V. Where it is practical to do so, the scene should be processed for items that may help to trace or identify the offender. Such items will often be minute and quite fragile.</u></p> <p><u>Examples:</u></p> <p>Blood stains</p> <p>Seminal stains</p> <p>Bite marks</p> <p>Hairs</p> <p>Fibers</p> <p>Fingerprints</p> <p><u>W. Fingerprint fragments are found at most crime scenes. While a full set of latent prints is rarely discovered, efforts should be made to collect whatever fingerprint fragments exist.</u></p> <p>Latent : residue from finger oils left on a solid object, exposed with powders or other media.</p> <p>Plastic: fingerprints directly embedded in a soft object.</p> <p>Visual: Observable to the eye.</p> <p>Fingerprints</p> <p><u>Since most human activity produces fingerprints, prints from persons with legitimate access to the scene should also be collected and eliminated. This helps to insure that false leads are not generated.</u></p> <p><u>Example:</u></p> <p>The residents of a home, which has been burglarized, should be fingerprinted for elimination purposes.</p> <p>Evidence Standards or Reference Standards</p> <p>Often, materials at the scene may have been unknowingly transferred to the perpetrator.</p> <p>A suspect may be found with such material on his person or in his possession at the time of arrest.</p> <p>Evidence Standards or Reference Standards</p> <p><u>X. Samples for later comparison should therefore be collected when the scene is processed.</u></p> <p><u>Examples:</u></p> <p>Soil collected at an outdoor scene may be compared with soil on the suspect's shoes; or safe insulation collected at the scene of a burglary can be compared with dust in a suspect's cuffs. Similarly, automobile paint at a hit-and-run scene may later be matched with paint on a suspect's vehicle.</p> <ul style="list-style-type: none"> <li>• Collecting Evidence</li> </ul> <p><u>Y. Firearms</u></p> <p>Don't be too hasty to collect unless safety or preservation requires.</p> <p>Lint and dust in barrel may be microscopically examined and compared with deposits in suspect's pocket or holster.</p>

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	<p>In a contact shot, debris from the wound may be in or on the firearm. Handle carefully to avoid destroying any print. Use wooden grips if needed for handling since they rarely hold useable latent prints. Never insert pencil into barrel. Pencil can be used in trigger guard behind the trigger.</p> <p>Unload for safety reasons. The location and status of each round (fired/unfired) should be noted in a diagram. Number chambers clockwise and indicate the status of each cartridge</p> <p>Spent (fired) cartridges, bullets &amp; casings</p> <p>Photograph and note location of each.</p> <p>Carefully retrieve – do not scratch, dent or otherwise mar surface.</p> <p>Package each individually</p> <p>Do not mark the objects themselves, mark the container into which placed.</p> <p>If shotgun shells are involved, the paper or plastic wadding should be recovered.</p> <p>At the scene, the number of cartridge cases should equal the number of bullets recovered or located. If not continue searching.</p> <p>Associated Evidence</p> <p>Z. <u>Blood</u></p> <p>Minimum amount of whole blood collected should be 10cc or two teaspoons full.</p> <p>Wet blood</p> <p>Soak piece of sterile filter or clean blotter paper, allow to dry, then place in jar or test tube.</p> <p>Under no circumstances package or send wet blood to the lab.</p> <p>Collect dried blood as much as possible. Best method on</p> <p>Objects/articles</p> <p>Take possession of items</p> <p>May require some property damage...first ask permission of property owner...if not received take legally. Examples:</p> <p>Removal of tiles or wallpaper</p> <p>Dismantling or sawing of window frame</p> <p>May be scraped if the object cannot be moved.</p> <p>Use a clean razor, sharp knife, scalpel</p> <p>Place scrapings into white piece of paper, folded with druggists fold and sealed with tape.</p> <p>AA. <u>Seminal Stains</u></p> <p>Found in cases involving both normal and deviant sexual activity.</p> <p>Semen is gray-white in color, and in liquid form has a chlorine like odor</p> <p>Routinely check for at homicides and suspicious deaths</p> <p>Could be present in arson and burglary cases</p> <p>Seize all clothing of suspects and victim(s) ASAP.</p> <p>When searching, pay particular attention to bed sheets, pillows, blankets, mattresses (check reverse side), rugs, and furniture upholstery.</p>



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	<p>Do not disregard floors and walls.</p> <p>If outdoors, check discarded paper or articles of clothing, leaves, grass and rocks.</p> <p>All damp materials should be spread on clean paper and air dried in draft free area. Preservation agents or refrigeration are not needed for dry stains.</p> <p>If stain is wet, collect on glass slide and cover with cover slide.</p> <p>If stain is dry, scrape off and package similar to dried blood sample.</p> <p>Separately place all articles into air tight containers. Clean paper on which item was dried should also be submitted. Recognize that when wrapping or packaging items, that friction can damage the sample. Insulate clothing folds with clean paper.</p> <p><b>BB. Bite Marks</b></p> <p>Every human possesses a unique tooth structure that can be used to identify individuals.</p> <p>Can be used to identify a body whose identity is unknown or to identify or connect a suspect with victims.</p> <p>Are frequently found on homicide, sexual assault and child abuse victims.</p> <p>In burglaries and robberies, suspects may partially eat at the scene.</p> <p><u>When discovered, must act quickly, to ensure the marks are recorded and preserved.</u></p> <p>Visual exam is 1st step</p> <p>Re-examine under ultraviolet or infrared light.</p> <p>Repeat process 24 hours after 1st exam</p> <p>Photograph</p> <p>Close up - one to one comparison</p> <p>2nd set with measuring scale</p> <p>A professional with experience in this area is recommended.</p> <p>Suspected teeth must also be collected for comparison.</p> <p><b>CC. <u>Hairs</u></b></p> <p>Three major parts</p> <p>Root end or bulb</p> <p>Shaft</p> <p>Tip end</p> <p>Lab can determine if</p> <p>Animal or human</p> <p>Possible racial origin</p> <p>Region of the body it came from</p> <p>Hair standards of victims &amp; suspects need to be taken. First comb and save samples. Then cut second set of samples as close to skin as possible.</p> <p>50-100 specimens from various head areas</p> <p>25-50 specimens from pubic areas</p> <p>20 specimens from other areas</p> <p><b>DD. <u>Collecting</u></b></p> <p>Use forceps to collect visible fibers</p>

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Use evidence sweeper with filters prior to dusting for latent prints  
Collect from victim during medical exam  
Collect clothing of all involved  
Check entry and exit points for hairs and fibers

EE. Packaging

Never secure a piece of paper or cardboard with tape  
Place in clean screw-top jar, a folded paper, pillbox, or envelope with corners sealed.

FF. Fibers

Fibers of unknown source can be compared with known specimens.  
Fibers are the smallest unit (filament) of a textile yarn.  
May be divided into the following classes:

Animal  
Wool  
Silk  
Fur  
Vegetable  
Cotton  
Linen  
Jute  
Mineral  
Glass  
Wood  
Asbestos  
Synthetics  
Rayon  
Nylon  
Orlon  
Dacron

Collection & Packaging

Same as for hairs

GG. Fingerprints

Fingerprints are produced by the raised friction ridge patterns on a person's hands. These friction ridges aid in the grasping of objects; and the patterns may be transferred to a surface where ink, blood, dirt or the like are present.

Use of Fingerprints in Criminal investigations

Value of prints in identifying individuals involved.  
While persons can be identified by various means (e.g., name, physical description, and tattoos) fingerprints are a uniquely valuable identifying feature.

Fingerprints are universal

All human beings have friction ridge detail on their fingers.  
Fingerprints are constant and unchangeable  
Friction ridges develop during the fetal stage and remain unchanged throughout a person's life.  
Fingerprints are individual

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No two persons have exhibited identical fingerprints. Each set of prints is unique to the individual.

Fingerprints are transferable

As noted above, an image of one's fingerprints will be left on any object touched. Such prints can then be used for identification purposes.

The natural secretions of the body act as "ink", but subsequent processing is needed to make these prints visible.

Process prints ASAP, even though they may be successfully developed days after they have been made.

Stability of the prints affected by a number of variables:

Climatic conditions

Physical characteristics of the individual

Nature of the surface

Locating prints

Most fruitful places:

point of entry

offender's path

point of exit

Flashlight held at sharp angle will produce an oblique light to help locate.

Examine surfaces from several angles.

Mentally reconstruct criminal's path from point of entry to exit point thinking about what he/she did and what he/she touched.

Fingerprint Patterns

All fingerprints fall into one of three general pattern groupings, and each finger contains only one such pattern:

Arch Pattern

In this general group, the friction ridges of the finger enter on one side of the impression and tend to flow out the other side with a rise or wave in the center.

Arch patterns prints can be further classified as plain arches or tented arches.

About six percent of all fingerprints exhibit an arch pattern.

Loop Pattern

Loop pattern prints contain friction ridges that flow inward and re-curve back toward the point of origin. This pattern also contains a single delta shaped divergence of ridges in front of the re-curving ridges.

Loop prints are subdivided into two basic types:

a) Ulnal loops: Here, the friction ridges flow from and re-curve toward the little finger of the hand (Ulnal bone side). In order to recognize an Ulnal loop print, the investigator must know whether the print came from the left or right hand – since ridges on the left hand will re-curve to the left and ridges on the right will re-curve to the right. The Ulnal loop pattern is found in approximately sixty percent of all fingerprints.

Radial loops:

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	<p>In this loop pattern, the friction ridges flow from and re-curve toward the thumb of the hand (radius bone side). As the Ulnar Loops, the investigator must know whether the print came from the left or right hand in order to recognize a radial loop – since ridges from the left hand will re-curve to the left. The radial loop pattern occurs in about five percent of all fingerprints.</p> <p>Whorl Pattern</p> <p>In this pattern, the friction ridges have two delta-shaped divergences with re-curving ridges in front of each.</p> <p>2. Whorls are further classified as:</p> <p>Plain whorls</p> <p>Central pocket loop whorls</p> <p>Double loop whorls or</p> <p>Accidentals</p> <p>Approximately twenty-nine percent of all fingerprints.</p> <p>Categories of Fingerprints</p> <p><u>Inked Prints</u></p> <p>Fingerprint impressions taken by inking a person's fingers and transferring the images to a standard fingerprint card are referred to as inked prints.</p> <p>Inked prints are being replaced by electronic scanning or use of chemically developed prints.</p> <p>Elimination prints</p> <p>Inked prints may also be taken for the purpose of eliminating the latent prints of persons with legitimate access to the crime scene.</p> <p>Elimination prints are important for whenever a piece of evidence may have been handled by someone other than the perpetrator of the crime. Examples:</p> <p>Elimination prints may be taken from a bank teller who handled a forged check, or from the tenant of an apartment that was burglarized.</p> <p>Major Case Prints</p> <p>Palms, fingertips and finger edges of suspect are taken when latent prints are found at the crime scene.</p> <p>Latent Prints</p> <p>Non-visible fingerprints produced through the transfer of the natural body oils to articles in scenes.</p> <p>Can link a suspect to the scene and provide circumstantial evidence of his guilt.</p> <p>Processing</p> <p>Make it visible enough to be photographed and lifted.</p> <p>If the print is already visible, further processing is normally not required prior to photographing the print.</p> <p>Non-porous surfaces is a three-step process:</p> <p>Dusting:</p> <p>Surfaces that do not absorb body oils (e.g., metal, plastic, and glass) should be dusted.</p>

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	<p>Use a brush powder lightly over a surface containing latent prints will cling to the grease and moisture in the ridge of the print, making the pattern visible.</p> <p>Brush or magna brush (magnet and iron fillings in powder) can be used instead of a brush and powder.</p> <p>The color of the powder used should provide the greatest photographic contrast with the color of the background and surface.</p> <p>Black powder – used on light colored objects.</p> <p>Gray powder – used on dark colored objects and on mirrored surfaces that photograph black.</p> <p>Silver powder – on surfaces or objects.</p> <p>Photographing</p> <p>Once the print is visible, photographed with a fingerprint camera or close-up attachment on a standard camera. Photograph the item straight-on to avoid illusory effects</p> <p>Lifting</p> <p>If the original surface on which the print exists cannot be retained, the print should be recovered by lifting it with rubber lifts or fingerprint lifting tape (a special form of clear cellophane tape) as follows:</p> <p>A rubber lift or piece of tape sufficiently large to cover the area is prepared.</p> <p>Carefully press into the latent print, starting at one edge and smoothing the material over the print while taking care to avoid air bubbles under the lift or tape.</p> <p>The lift or tape is peeled from the print and pressed onto amount of contrasting color.</p> <p>The location of the print, the initials of the investigator, the date and the report number should be noted on the rear of the mount.</p> <p>Since latent fingerprints may become evidence, their legal and physical integrity must be maintained from the time first found to preservation in court.</p> <p>Prints on porous surfaces</p> <p>Latent prints may also be found on porous, absorbent surfaces (such as paper, cardboard, leather or wood).</p> <p>Since the body oils are absorbed into the surface, chemical treatment rather than dusting must be employed to make the print visible. For this reason, porous surfaces should be processed in the laboratory wherever possible.</p> <p>Plastic or molded prints</p> <p>Fingerprint impression recorded when fingers come in contract with soft pliable surface (fresh putty, wax, clay, soap, butter and some types of grease).</p> <p>Processing</p> <p>A plastic print need not be dusted but can simply be photographed with oblique lighting like any other impression. If necessary, a fine cast of the print can be made.</p> <p>Visible prints</p>

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	<p>A visible print is one which can be seen by the naked eye. Such prints may be found at the crime scene where dirt, paint, blood, or the like act as a transfer agent for the print.</p> <p>A visible print need only be photographed. Lifting of the print is normally not possible.</p> <p>Once the identity of a suspect is developed, the latent print can be compared to his inked card and a positive determination of identity made.</p> <p><b>Print Comparisons</b></p> <p>When comparing two sets of fingerprints (e.g., a latent print from the scene with the defendant's linked print), an identification expert will be called to point out similarities of ridge detail between the two prints.</p> <p>While no minimum number of points of comparison are required for an expert opinion of identity, most experts will not render an opinion on less than eight points of similarity.</p> <p>The more common the print pattern involved, the more points the expert will need to form an opinion.</p> <p><b>Trace Evidence &amp; Tool Marks</b></p> <p><u><i>An offender while in and who departs the scene of a crime often leaves inadvertent evidence of his presence and identity.</i></u></p> <p><i>The two basic forms of such trace evidence are:</i></p> <p><b>Impressions</b> – <u>Indentations made in soft material by shoes, tools, tire treads, or the like.</u></p> <p><b>Prints</b> – Distinctive impressions such as heel prints or latent fingerprints which are transferred onto hard surfaces.</p> <p>The investigator should attempt to locate and recover all relevant impressions and prints at the scene.</p> <p>HH. <u>Tire marks/prints</u></p> <p><b>Tool marks</b></p> <p>Tool marks may be identified because of the compression and impression marks.</p> <p>Tools or objects used to pry, cut, or otherwise damage something can be examined for similarity.</p> <p>Tools or objects have particular identifying markings like fingerprints that can be matched.</p> <p>Photograph the mark or gouge using side lighting.</p> <p>Retrieve the entire mark or gouge if possible.</p> <p>Use a silicon moulage to obtain a reversal of the impression.</p> <p>Package evidence so that no further damage will occur and misrepresent examination.</p> <p><b>Preserving &amp; Making Impressions of Footprints &amp; Marks</b></p> <p>II. <u>Photography</u></p> <p>After being cleaned of loose debris, each impression should be photographed like any other evidence at the scene.</p> <p>Normally, the best results are obtained by mounting the camera on a tripod directly over the impression and directing a flash at a low</p>

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	<p>angle across the impression. This oblique method of lighting highlights any irregularities on the surface of the impression, which could be important to the investigation.</p> <p>JJ. <u>Impressions</u> can be recovered from the scene of a crime by photography and/or by rough or smooth casts.</p> <p><u>A laboratory technician</u> can compare the plaster cast of a tire tread with the actual tires from a suspect vehicle.</p> <p>Similarly, a dusty heel print lifted at the crime scene may be compared with the suspect's shoes.</p> <p>Preserving Evidence</p> <p>Once physical evidence has been identified and collected, it must be safeguarded until produced in the courtroom.</p> <p>The evidence must be physically preserved, and it must also be properly maintained in order to meet legal requirements for admissibility at trial.</p> <p>Maintaining Physical Integrity of Evidence</p> <p>KK. Photographing</p> <p>As evidence is discovered at the scene, it should be photographed before being touched.</p> <p>Photographs provide:</p> <p>A permanent record of the object in the event subsequent handling alters or destroys it (as where attempts to make a plaster cast of a foot print ruin the impression or a laboratory examination destroys the evidence).</p> <p>An opportunity for the investigator to review the physical evidence in the case without handling the actual objects; and</p> <p>An opportunity for the jury to examine evidence that is too dangerous, cumbersome or impractical to produce in court (e.g., dynamite in a bombing case, a money safe which has been peeled, or tool marks on a door).</p> <p>Packaging</p> <p>Physical evidence should also be packaged in order to prevent loss, tampering, breakage or deterioration.</p> <p>Clean bottles, cans, envelopes, bags and other containers properly sealed will assist in accomplishing.</p> <p>Maintaining Legal Integrity of Evidence</p> <p>LL. <u>Identification of evidence</u></p> <p>In order to have evidence admitted in court, the officer who originally discovered the evidence must identify the item as the same object he found at the scene. This requirement is best met by taking certain precautions at the time the evidence is discovered.</p> <p>MM. Marking the Evidence</p> <p>There is no legal requirement that evidence be marked when discovered, but the investigator should generally write or scratch his initials, the date, and an individual letter on each item of evidence collected. Exceptions:</p>

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	<p>No attempt should be made to mark evidence when the item by its nature is impossible to mark (such as dust, fibers or heroin).  When marking would alter its monetary or aesthetic value (as with a diamond ring, an antique firearm or a rare coin).  When marking might hinder subsequent analysis as in the case of bullets or documents containing fingerprints.  It is good procedure to have two investigators mark the evidence. This guards against legal and practical difficulties caused by the death, resignation, etc., of one of the investigators before the time for trial.</p> <p>NN. Tagging the Evidence  Objects, which are not suitable for marking, might be tagged. A paper tag firmly affixed to the item of evidence can serve as a basis for later identification. Example:  An antique firearm – which could be damaged by marking, could easily be tagged.  Many agencies both mark and tag evidence, since the tag provides greater space for recording pertinent data.</p> <p>OO. Sealing the Evidence  Placing articles of evidence in a paper or plastic container and sealing it with tape insures the object is not improperly handled and preserves both the legal and physical integrity of the evidence.  A slip of paper with the appropriate identifying information is either enclosed in the package or affixed to the outside.</p> <p>PP. Chain of Custody of Evidence  Basic principle  When a question arises as to the authenticity of an item offered as evidence or its possible alteration or contamination, the location and condition of the article from the time of its discovery must be proved.</p> <p>QQ. <u>Proof of this chain of custody demonstrates that:</u>  <u>The evidence offered is the same evidence found at the scene.</u>  There has been no opportunity to replace or improperly alter the evidence; and  Any change in the condition of the evidence can be explained (i.e. destruction through laboratory analysis).  In establishing the chain of custody, testimony and documents should be presented to prove who had it in his/her possession, when it was received and released and where the evidence has been at each stage from its collection through processing and storage. Was it:  Hand carried and physically given to the laboratory technician; or  Sent by registered mail or air express (thereby insuring that a receipt will be provided by the parties taking possession of the item(s).</p> <p>Storage at police station or laboratory  Most agencies maintain a property room or locker whereby evidence deposited is received by the officer in charge of the room and evidence removed is likewise signed for.</p>



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	<p>A log book or voucher system showing deposits and withdrawals is then maintained.</p> <p>When evidence is taken from the property room to Court, a record of that removal should be made.</p> <p>Once the evidence is introduced at trial, the court is responsible for its security.</p> <p>Conclusion</p> <p>This class touches on just part of the information available to assist officers in crime scene evidence collection. It is not designed to make expert investigators of the basic recruit.</p> <p>A resources for handouts, booklets, and general information is available through the <u>NM Crime Lab in Santa Fe, or the Southern NM Crime Lab in Las Cruces.</u></p>